Group Effectiveness Research Laboratory

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A CONSIDERATION OF TWO ASSUMPTIONS UNDERLYING FIEDLER'S CONTINGENCY MODEL FOR THE PREDICTION OF LEADERSHIP EFFECTIVENESS

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A B S T R A C T

The present paper can best be viewed as an attempt to explore two of the basic assumptions underlying Fiedler's (1964, 1965) Contingency Model: (1) the assumption that different group-task situations "require a different leader-group member interaction," i.e., "demand" different types of leadership behaviors; and (2) the assumption that these "demands" will covary systematically with the three dimensions of the group-task situation specified by the Contingency Model. One hundred forty-one male undergraduates rated the way they believed the "Most Effective Leader" (MEL) should perform in each of eight group-task situations on a Behavioral Description Questionnaire. The results indicated that although these ratings of the MEL's behavior did vary across the different group-task situations, the ratings were significantly influenced by only two of the three group-task dimensions isolated by Fiedler, namely, the leader-member relations and the position power dimensions. Additional hypotheses related to the Contingency Model were also investigated and discussed.

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In a recent series of papers, Fiedler (1964, 1965) has presented a model for the prediction of group performance. As Fiedler points out, "The model is predicted on the assumption that the type of leadership behavior required for good group performance is contingent upon favorableness of the group-task situation for the leader." More specifically, Fiedler identifies three major dimensions of the group-task situation: (1) the nature of the affective leader-member relations; (2) the task structure; and (3) the leader's power position in the group.

The dimension of affective leader-group relations refers to the personal relationship between the leader and key members of his group. According to Fiedler, this dimension reflects what "is probably the most important single determinant of group processes which affect team performance. The liked and respected leader can obtain compliance from his group under circumstances which, in the case of a disliked or distrusted leader, would lead to open revolt."

The task structure dimension refers to the clarity or ambiguity of the task. Here one may distinguish between highly structured, unambiguous tasks where the leader and his group members know exactly what needs to be done and the way to do it (e.g., a missile crew performing a count-down) and unstructured, ambiguous tasks where neither the leader nor the members can readily specify the manner in which such a task is to be executed (e.g., planning a program for a picnic). Fiedler views the task structure dimension as the second most important determinant affecting team performance.

The final dimension of "leader position power" refers to the degree of formal or informal power inherent in the leadership position. Thus, a leader with high

position power is one who can utilize rewards and sanctions, and who has authority over his men that is supported by the organization within which the group operates; a leader with low position power is one who essentially is restricted to using persuasion and other indirect means of influence.

By dichotomizing each of these dimensions, eight distinct types of group-task situations can be identified as follows:

	Affective Leader-Member Relations	Task Structure	Leader's Position Power
1	Good	Structured	High
2	Good	Structured	Low
3	Good	Unstructured	High
4	Good	Unstructured	Low
5	Poor	Structured	High
6	Poor	Structured	Low
7	Poor	Unstructured	High
8	Poor	Unstructured	Low

Two points about these eight group-task situations should be noted:

(1) According to Fiedler, these situations vary along a continuum of favorableness to unfavorableness for the leader. That is, these situations differ with respect to the degree to which they permit the leader to "influence and control his group members." More specifically, the leader is seen as having maximum influence over, and control of, his group members in group-task situation 1, and minimal influence and control in situation 8.

(2) Each of these group-task situations may "require a different leader-group member interaction." (Fiedler, 1964). That is, these different group-task situations may well demand different types of leadership behavior in order for the group to operate at maximum efficiency. Thus, for example, one type of situation may require a permissive, non-directive, considerate type of leader, while another group-task situation may require a controlling, managing, directive type of leader. Fiedler (1964) has argued that such is indeed the case.

One of the major variables investigated by Fiedler and his associates has been "the leader's esteem for his least preferred coworker (LPC)." There is a considerable amount of evidence indicating that High LPC leaders are more effective than Low LPC leaders in certain group-task situations, while Low LPC leaders are more effective than High LPC leaders in different types of group-task situations. In his earlier writings, Fiedler (e.g., 1958) viewed the High LPC leader as a person who is permissive, non-directive, and considerate; and the Low LPC leader as a person who is controlling, managing, and directive. More recently however, Fiedler (1964, 1966b) has emphasized a motivational, rather than a behavioral basis for distinguishing between (or describing) High and Low LPC leaders. More specifically, Fiedler now views the High LPC leader as a person who "obtains need satisfaction or reinforcement as a consequence of having experienced success in interpersonal relations;" while the Low LPC leader is viewed as an individual who "obtains his need satisfaction or reinforcement through his achievement (or participation) in assigned group tasks." Thus, although a High LPC will, under normal conditions, tend to be more permissive and considerate than a Low LPC leader, this is not necessarily the case in all situations. That is, in any given situation, the High LPC leader's motivation for achieving satisfying interpersonal relations may "cause him to behave" in a more directive, controlling way than a Low LPC leader. Similarly, the Low LPC leader's motivational structure may "cause him to act" in a permissive, considerate manner. Thus, although High and Low LPC leaders are still viewed as behaving differentially in a given situation, the specific types of behaviors they display will vary as a function of their underlying motivational orientations.

To summarize briefly, the contingency model may be seen as an attempt to tie together, and integrate, the findings of twelve years of research which suggest that different types of leaders (i.e., High LPC vs. Low LPC) are differentially effective in different types of group-task situations. In particular, Fiedler

hypothesizes that in situations that are very favorable or very unfavorable for the leader, a Low LPC leader will be most effective; while in situations which are moderately favorable or moderately unfavorable for the leader, a High LPC leader will be most effective. Several validation studies (e.g., Fiedler, 1966a, Shaw and Blum, 1966) have provided support for this as well as other hypotheses generated by the contingency model.

The present paper can best be viewed as an attempt to explore two of the basic assumptions underlying the contingency model. More specifically, Fiedler's conceptualization assumes that High and Low LPC leaders are differentially effective in different group-task situations because (a) these situations call for different kinds of leadership behaviors for maximally efficient group performance, and (b) High and Low LPC leaders differ with respect to leadership styles and orientations, and thus one type of leader (e.g., a High LPC leader) will better meet the "demands" of a given situation than will another type of leader (e.g., a Low LPC leader). Further, it should be recalled that from Fiedler's point of view, these situational demands should covary with the three dimensions of the contingency model (i.e., affective leader-member relations, task structure, and leader's position power). More specifically, Fiedler has hypothesized that these three dimensions are of differential importance. That is, the kinds of leadership behaviors that are required for maximal group effectiveness should vary most with the nature of the affective leader-member relations, next most with the task structure, and least with the leader's position power.

Thus the major purpose of the present paper is to investigate the following two assumptions:

1. The assumption that different group task situations "require a different leader-group member interaction," i.e., "demand" different types of leadership behaviors; and

2. The assumption that these "demands" will covary systematically with the three dimensions of the contingency model.

In addition, an attempt will be made to explore one possible reason for the differential behaviors of High and Low LPC leaders. That is, although Fiedler(1966b) has presented evidence that High and Low LPC leaders do indeed behave differentially in given situations, the determinants of this differential behavior have not been made explicit. While Fiedler has argued that the basis of this differential behavior is the different motivational orientations of High and Low LPC leaders, one may raise the question of whether these motivational differences are directly reflected in behavior or whether they operate through an intervening variable. That is, it may well be that High and Low LPC leaders behave differently because (a) they perceive the "demands" of a given situation differently and (b) they act in accordance with their perceptions. Alternatively, High and Low LPC leaders could (a) perceive the "demands" of a given situation similarly, but (b) have characteristically different modes of responding to the same situation.

Thus, a second purpose of the present study is to investigate the ways in which subjects who vary in LPC perceive the "demands" of the eight group-task situations. Although the second alternative (i.e., that subjects differing in LPC perceive the same "demands") seems more consistent with Fiedler's position, it should be noted that both of these alternatives are consistent with the general notion that High and Low LPC leaders differ with respect to leadership styles and orientations. Further, it should be noted that these two alternatives are not mutually exclusive, and it is possible that both occur simultaneously.

To summarize briefly, the purpose of the present paper is twofold: (1) to investigate two assumptions underlying Fiedler's contingency model and (2) to explore the possibility that subjects differing in LPC differentially perceive the

"demands" of a given group-task situation. Since the specific hypotheses to be tested in the present paper will be more clearly understood if the reader is familiar with the type of data that were obtained, let us first turn to a consideration of the methods and procedures used.

Methods and Procedures

The subjects were 141 male undergradustes who participated in the experiment as part of a course requirement. All subjects were tested simultaneously during a one hour session. Upon entering the experimental room (a large auditorium), subjects were randomly assigned to seats. After all the subjects were seated, questionnaire booklets were passed out. Each booklet contained the following:

1. A standard form of Fiedler's LPC Scale. This instrument consists of 25, eight-place bipolar adjective scales, in the Semantic Differential format. The subjects are asked to

> "think of your least preferred coworker--that is, think of the one person you have had the most difficulty working with, and rate that person on the following scales. Remember, we are not necessarily asking you to think of the person you liked the least, but the one person you have had the most difficulty working with."

2. A handout describing the three dimensions of the contingency model, with examples representing the endpoints of each dimension. The handout was not attached to the booklet, and thus the subjects could refer to it at all times. The handout is reproduced in Table 1.

3. Each of the following eight pages of the booklet contained a Behavioral Description Questionnaire (BDQ). The BDQ is based directly on Bales' (1951) method of Interaction Process Analysis. Each questionnaire consists of twelve items, each representing one of Bales' interaction process categories. That is, each item describes a different type of behavior (e.g., "helps to clarify the situation by providing useful information") and the subjects are asked to indicate the degree to

TABLE 1

Descriptions of Group Task Situations

On each of the following pages, you will be given a description of a certain group task situation. These group task situations will be described in terms of three dimensions, namely: (1) the affective leader-group relations; (2) the task structure; and (3) the power position of the leader. Following is a list of short explanations of the terms we have used.

AFFECTIVE LEADER-GROUP RELATIONS. Refers to the personal relationships between the leader and the members of his group.

Good affective relations refers to a situation where the leader feels, and is, accepted and liked by the members of his group.

Bad affective relations refers to a situation where the leader feels, and is, rejected and disliked by the members of his group.

TASK STRUCTURE. Refers to the degree of clarity or ambiguity of the task the group is working on.

A highly structured task refers to a situation where the task the group is working on is a specific one -- the goal is clear, and it can be reached by a definite procedure. That is, there is one correct solution to the problem the group is working on, and there is one correct way of reaching the solution. Further, once a solution has been reached, or the task has been completed, the correctness of the solution can easily be seen.

A highly unstructured task refers to a situation where the task and goal of the group are vague and unspecific. There is more than one correct solution, and more than one way to reach a solution. That is, there is no specific manner in which to execute such a task. Further, once the task has been completed, there is no precise way of knowing whether the method used, or the solution itself, was the best one.

POWER POSITION OF THE LEADER. Refers to the degree of control and power that the leader has over his members.

The leader has a high power position when he has a high degree of authority over his group. Further, this authority is supported by the organization within which the group works. His role as the group leader is independent of the members. He is appointed by the larger organization, and is acknowledged as the leader by the members. Further, group members have to obey his instructions. He is expected to supervise and evaluate the work of the group members. He can punish or reward members at his own discretion. For example, he can effect a promotion or fire or penalize a group member.

The leader has a low power position when he has no rewards or sanctions at his disposal. He has to influence the group mainly by persuasion. Further, his role as the group leader is dependent upon the members. That is, the members could replace the leader if they so desired. Thus, he has relatively little direct authority over his group.

On each of the following pages, one group task situation will be described to you. For example, one group task situation might be described as follows: The leader has a high power position, good affective relations, and a highly unstructured task.

which a given stimulus person engages in the particular behavior. More specifically, subjects respond to each item by checking an eight-place scale ranging from "very true" (8) to "very untrue" (1). The BDQ is reproduced in Table 2.

At the top of each page, one of the eight group-task situations was described (e.g., "Given a group-task situation where the leader has GOOD AFFECTIVE RELATIONS, where the group is working on a HIGHLY STRUCTURED TASK, and where the leader has a LOW POWER POSITION"), and the subjects were asked to describe the "Most Effective Leader" in that situation. More specifically, each subject was told to

> "think of the kind of situation described at the top of each page, and than indicate the way you think the most effective leader would behave in that situation. That is, in that situation, what kind of leadership behaviors do you think are necessary if the group is to operate at maximum efficiency and be maximally productive. Remember, we want you to tell us the way you believe the most effective leader would behave and not necessarily the way that a person you would like would behave."

The eight pages (one for each of the group-task situations) were randomized within each booklet, and two orders of presentation were used to describe the group task situations. For half the subjects, the group-task situation was described in terms of (1) affective relations (2) task structure, and (3) position power. The order was reversed for the remaining subjects. Since neither the order effect nor any of its interactions were significant in any of the analyses conducted, it will not be referred to in the present paper.

To summarize briefly, an LPC score and twelve judgments of the Most Effective Leader (MEL) in each of the eight group-task situations was obtained from each subject. Rather than considering each of the twelve behavioral judgments independently, four scores were computed for each group task situation. Following the work of Bales (1951), the twelve specific behaviors were viewed as measures of two types of interpersonal behaviors (positive and negative socioemotional behaviors) and two types of task oriented behaviors ("giving answers" and "asking questions"). Thus

TABLE 2

The Behavioral Description Questionnaire

Given a group-task situation where the leader has a HIGH POWER POSITION, and where there are A HIGHLY UNSTRUCTURED TASK AND GOOD AFFECTIVE RELATIONS,

THE MOST EFFECTIVE LEADER:

1. Would help and encourage the other group members.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

2. Would laugh and joke a lot.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

3. Would tend to agree with other members' ideas and suggestions.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

4. Would give many useful suggestions to get the job done.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

5. Would freely express his own personal feelings and opinions.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

6. Would help to clarify the situation by providing useful information.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

7. Would often ask for more information about the task.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

8. Would often ask for the opinions and feelings of others.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

9. Would often ask for suggestions.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

10. Would often disagree with the other members' ideas and suggestions.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

11. Would often appear to be anxious and tense.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

12. Would often be antagonistic and aggressive toward other members.

very true: 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : very untrue

the basic data obtained from each subject was his LPC score and eight sets of four behavioral expectations. Since each of the behavioral expectations was obtained by summing over three judgments, the scores could range from 3 (it is completely untrue that the MEL would engage in this type of behavior) to 24 (it is completely true that the MEL would engage in this type of behavior). These data were then used to test the following hypotheses:

1. Different group-task situations "demand" different kinds of leadership behaviors for maximal group effectiveness. More specifically, it was hypothesized that subjects' ratings of the way the most effective leader should behave would vary across group task situations;

2. The different situational demands (i.e., ratings of the way the MEL should behave) will covary with the three dimensions of the contingency model. Specifically, these "demands" should vary most with affective leader-member relations, next most with task structure, and least with leader position power; and

3. Subjects differing in LPC will differentially perceive the demands of the various group task situations, i.e., the ratings of the way the MEL should behave will vary as a functions of the subject's LPC score.

On the basis of their LPC scores, the subjects were divided into three equal groups of 47 subjects each (i.e., a high, middle, and low LPC group. The basic experimental design was a mixed analysis of variance with LPC serving as a "between" subject" main effect, and the three dimensions of the contingency model serving as "within subject" main effects. A separate analysis was conducted for each of the four types of behaviors.

Although the analysis of variance methodology is often used only to determine the presence or absence of a significant difference between groups or between different levels of a given variable, it can also be used to estimate the strength

of obtained relationships between independent and dependent variables (e.g., see Bolles and Messick, 1958; Fishbein, 1963; Miller, 1961; Triandis and Triandis, 1960, 1965). More specifically, the analysis of variance technique is a procedure that partitions the total variance (in the dependent variable) into its component parts. Thus, one can determine the per cent of the total variance that is associated with (i.e., under the control of) each of the independent variables and their interactions. The more of the variance controlled by a variable, the more important is the variable. However, since a considerable portion of the total variance is often a function of individual differences between subjects (including treatment by subject interactions), errors of measurement, and other uncontrolled sources of variation, a clearer picture of the relative importance of each independent variable can be obtained if one considers the proportion of variance associated with each of the variables after individual differences and other uncontrolled sources of error have been eliminated. That is, one may look at the per cent of controlled variance associated with each independent variable as well as the per cent of the total variance accounted for by each of these variables. Since the second hypothesis presented above is primarily concerned with investigating the relative importance of the three dimensions of the contingency model as determinants of "situational demands" placed on the Most Effective Leader, the summary analyses of variance tables that will be presented will contain estimates of both the total and controlled variance accounted for by each variable and its interactions.[1]

Results and Discussion

The results of the four analyses of variance are presented in Tables 3 and 4. More specifically, the analyses of ratings of the way the MEL should behave in a positive and negative socio-emotional manner are presented in Table 3, while

analyses of ratings of the MEL's answer giving and question asking behaviors are presented in Table 4. In these tables, it can be seen that, considered together,

Tables 3 and 4 about here

the four major variables and all their interactions account for between 7.6 per cent and 17.8 per cent of the total variance in subjects' beliefs about the way "The Most Effective Leader" should behave. More specifically, LPC and the three dimensions of the contingency model control 17.8 per cent of the variance in beliefs about the MEL's positive socio-emotional behavior, 11.1 per cent of the variance in beliefs about his negative socio-emotional behavior, 8.4 per cent of the variance in beliefs about the MEL's engaging in "asking questions," and 7.6 per cent of the variance in beliefs about his "answer giving" behavior. Although this is clearly a significant and meaningful amount of variance to account for, it should be noted that between 80 per cent and 90 per cent of the variance in subjects' judgments about the way the MEL should behave is essentially left unexplained. Since only 25 per cent to 35 per cent of this variance can be directly attributable to individual differences, this clearly implies that other variables, relevant to the phenomena under consideration, still have to be isolated. Keeping this in mind, let us now turn to a consideration of the four major variables (i.e., LPC and the three dimensions of the contingency model) and their interactions.

1. LPC - Contrary to the third hypothesis, it can be seen that subjects differing in LPC do not have differential expectations about the way the MEL should act in any of the eight group task situations. Indeed, LPC and all its interactions with the three dimensions of the contingency model account for less than 1 1/2 per cent of the total variance and less that 12 per cent of the controlled variance in all four analyses. In no case, does LPC or its interactions with other

TABLE 3

Analyses of Variance of Judgments that the Most Effective Leader Would Perform Positive and Negative Socio-emotional Behavior Including the Per cent of the Total and Controlled Variance Accounted for by Each Variable and Its Interactions

		A - Positive Socio-emotional Behavior					B - Negative Socio-emotional Behavior				
Source	df	ss	ms	f	%T	%C	ss	ms	f	%T	%C
Between Ss	(140)	(6156.3)	(44.0)		(28.0)		(7747.6)	(55.3)		(36.6)	
LPC	2	71.0	35.5	< 1	0.3	1.8	10.6	5.3	< 1	0.1	0.4
LPC x Ss	138	6085.3	44.1		27.6		7737.0	56.1		36.6	
Within Ss	(987)	(15855.6)	(16.1)		(72.0)		(13409.6)	(13.6)		(63.4)	
Variables(situations)	(7)	(3725.5)	(532.2)	(42.91)**	(16.9)	(94.8)	(2072.1)	(296.0)	(25.74)**	(9.8)	(88.1)
Affective Rel. (A)	1	2487.3)	2487.3	120.68**	11.3	63.3	1291.5	1291.5	71.35**	6.1	54.9
Task Structure (B)	1	128.7	128.7	17.87**	0.6	3.3	41.0	41.0	3.69	0.2	1.7
Position Power (C)	1	583.1	583.1	23.55**	2.6	14.8	378.0	378.0	24.54**	1.8	16.1
A x B	1	0.0	0.0	< 1	0.0	0.0	9.8	9.8	1.22	0.0	0.4
A x C	1	502.6	502.6	50.26**	2.3	12.8	350.8	350.8	30.24**	1.7	14.9
B x C	1	6.1	6.1	< 1	0.0	0.2	0.0	0.0	< 1	0.0	0.0
A x B x C	1	17.7	17.7	2.53	0.1	0.4	1.0	1.0	< 1	0.0	0.1
Variables x LPC	(14)	(134.1)	(9.6)	(< 1)	(0.6)	(3.4)	(269.4)	(19.2)	(1.67)	(1.2)	(11.5)
A x LPC	2	56.0	28.0	1.36	0.3	1.4	46.1	23.1	1.28	0.2	2.0
B x LPC	2	7.0	3.5	< 1	0.0	0.2	40.4	20.2	1.82	0.2	1.7
C x LPC	2	20.3	10.2	< 1	0.1	0.5	122.2	61.1	3.97	0.6	5.2
A x B x LPC	2	21.3	10.7	1.02	0.1	0.5	6.7	3.4	< 1	0.0	0.3
A x C x LPC	2	16.2	8.1	< 1	0.1	0.4	51.7	25.9	2.23	0.2	2.2
B x C x LPC	2	7.8	3.9	< 1	0.0	0.2	1.9	1.0	< 1	0.0	0.1
A x B x C x LPC	2	5.5	2.8	< 1	0.0	0.2	0.4	0.2	< 1	0.0	0.0
Variables x LPC x Ss	(966)	(11996.0)	(12.4)		(54.5)		(11068.1)	(11.5)		(52.2)	
A x LPC x Ss	138	2843.5	20.6		12.9		2495.2	18.1		11.8	
B x LPC x Ss	138	994.1	7.2		4.5		1531.9	11.1		7.2	
C x LPC x Ss	138	3417.4	24.8		15.5		2125.1	15.4		10.0	
A x B x LPC x Ss	138	1445.2	10.5		6.6		1107.5	8.0		5.2	
A x C x LPC x Ss	138	1386.7	10.0		6.3		1595.5	11.6		7.5	
B x C x LPC x Ss	138	962.6	7.0		4.4		1204.6	8.7		5.7	
A x B x C x LPC x Ss	138	946.5	6.9		4.3		1018.3	7.3		4.8	
Total	1127	22011.9			100.0	100.0	21157.2			100.0	100.0

**p .001 -- *p .01

TABLE 4

Analyses of Variance of Judgments that the Most Effective Leader Would Perform Task-oriented Behaviors Including the Per Cent of the Total and Controlled Variance Accounted for by Each Variable and Its Interactions

		A - Giving Answers					B - Asking Questions				
Source	df	ss	ms	f	%T	%C	ss	ms	f	%T	%C
Between Ss	(140)	(6509.5)	(46.5)		(35.4)		(9851.0)	(70.4)		(34.7)	
LPC	2	13.8	6.9	< 1	0.1	1.0	124.2	62.1	< 1	0.4	5.2
LPC x Ss	138	6495.7	47.1		35.4		9726.8	70.5		34.3	
Within Ss	(987)	(11853.8)	(12.0)		(64.6)		(18529.7)	(18.8)		(65.3)	
Variables(Situations)	(7)	(1252.6)	(178.9)	(16.56)**	(6.8)	(88.3)	(2090.7)	(298.7)	(17.78)**	(7.4)	(87.6)
Affective Rel. (A)	1	718.1	718.1	38.20**	3.9	50.6	1385.2	1385.2	49.12**	4.9	58.0
Task Structure (B)	1	1.1	1.1	< 1	0.0	0.1	16.8	16.8	< 1	0.0	0.7
Position Power (C)	1	410.0	410.0	32.54**	2.2	28.9	485.4	485.4	19.04**	1.7	20.3
A x B	1	30.0	30.0	3.03	0.2	2.1	25.1	25.1	1.96	0.1	1.1
A x C	1	1.0	1.0	< 1	0.0	0.1	170.1	170.1	13.10**	0.6	7.1
B x C	1	71.4	71.4	9.52*	0.4	5.0	2.0	2.0	< 1	0.0	0.1
A x B x C	1	21.0	21.0	3.50	0.1	1.5	6.1	6.1	< 1	0.0	0.3
Variables x LPC	(14)	(152.0)	(10.9)	(1.01)	(0.7)	(10.7)	(172.3)	(12.3)	(< 1)	(0.6)	(7.2)
A x LPC	2	17.3	8.7	< 1	0.1	1.2	41.1	20.6	< 1	0.1	1.7
B x LPC	2	14.2	7.1	< 1	0.1	1.0	3.3	1.7	< 1	0.0	0.1
C x LPC	2	64.0	32.0	2.54	0.3	4.5	41.8	20.9	< 1	0.1	1.8
A x B x LPC	2	7.9	4.0	< 1	0.0	0.6	25.9	13.0	1.02	0.1	1.1
A x C x LPC	2	4.2	2.1	< 1	0.0	0.3	28.8	14.4	1.11	0.1	1.2
B x C x LPC	2	37.5	18.8	2.51	0.2	2.6	20.8	10.4	< 1	0.0	0.9
A x B x C x LPC	2	6.9	3.5	< 1	0.0	0.5	10.6	5.3	< 1	0.0	0.4
Variables x LPC x Ss	(966)	(10454.2)	(10.8)		(57.0)		(16266.7)	(16.8)		(57.3)	
A x LPC x Ss	138	2599.4	18.8		14.2		3886.7	28.2		13.8	
B x LPC x Ss	138	1442.5	10.5		7.9		2440.9	17.7		8.6	
C x LPC x Ss	138	1738.4	12.6		9.5		3514.3	25.5		12.4	
A x B x LPC x Ss	138	1363.3	9.9		7.4		1769.5	12.8		6.3	
A x C x LPC x Ss	138	1453.4	10.5		7.9		1791.1	13.0		6.3	
B x C x LPC x Ss	138	1035.7	7.5		5.6		1762.2	12.8		6.2	
A x B x C x LPC x Ss	138	821.5	6.0		4.5		1102.0	8.0		3.9	
Total	1127	18363.3			100.0	100.0	28380.7			100.0	100.0

**p .001 -- *p .01

variables approach the .01 level of significance. Thus it appears that leaders varying in their Esteem for their Least Preferred Coworker are not differentially effective in a given situation because they perceive the demands of that situation in different ways.

II. Group-Task Situations - The influence of the eight group-task situations as determinants of judgments about the way the MEL should behave is summarized on line 5 of Tables 3 and 4. There it can be seen that the three situational variables and all their interactions account for approximately 90 per cent of the controlled variance in all four analyses. Thus, almost all of the variance that is accounted for is directly attributable to variations in the group-task situations. Clearly then, as Fiedler has suggested, these different situations do seem to "demand" different types of leadership behaviors. However, in order to better understand the differences between these situations, a consideration of each group-task situation variable and its interaction is necessary.

A. Leader-Member Affective relations. In all four analyses, it can be seen that subjects expect the most effective leader to behave in a significantly different manner when he has "good" affective relations with his group members than when he has "bad" affective relations. More specifically, the MEL is expected to ask more questions, give more answers, and display more positive and less negative socio-emotional behavior when he has good than when he has bad affective relations with his group members. The mean differences for each of the four behaviors may be seen in Table 5.

Table 5 about here

In addition to influencing all four types of behavior, in Tables 3 and 4 it can be seen that consistent with Fiedler's hypothesis, the leader-member affective

TABLE 5

The Influence of Affective Leader-Member Relations on Expectations about the Most Effective Leader's Behaviors

Type of Behavior	Good Affective Relations	Bad Affective Relations	F
Positive Socioemotional	18.66	15.69	120.68
Negative Socioemotional	9.84	11.98	71.35
Giving Answers	18.90	17.30	38.20
Asking Questions	18.45	16.24	49.12

All F's significant beyond the .001 level of confidence. The higher the mean score, the more likely the MEL will engage in the particular type of behavior. Scores can range from 3 to 24.

relation dimension is the most important single determinant of expectations about the MEL's behaviors. That is, in all cases, the affective relations dimension accounts for more than 50 per cent of the controlled variance in expectations about the MEL's behavior.

B. Task Structure. Contrary to Fiedler's expectations, the degree of the task structure appears to play a relatively minor role in determining expectations about the MEL's behavior. Even though task structure does have a significant effect on expectations about the MEL's positive socio-emotional behavior (i.e., he is expected to show significantly more positive socio-emotional behavior in structured than in unstructured situations - $\bar{X}$ = 17.51 and 16.84, respectively, $p < .001$), it accounts for less than 0.6 per cent of the total variance and less than 3.3 per cent of the controlled variance in any of the four analyses. Here, however, it must be noted that the present analysis is concerned with subjects' expectations about a leader's behavior in hypothetical situations and not with actual behavior in real situations. Fiedler's model is based on an analysis of these latter situations and thus the finding does not necessarily mean that task structure is an irrelevant dimension in analyzing ongoing groups, nor that in a real situation, leaders do not take the task structure into account in determining their course of action. The finding does suggest, however, that the task structure dimension may not be as important as Fiedler has indicated, and certainly deserves a closer and more critical analysis.[2]

C. Leader's Position Power. As in the case with affective leader member relations, it can be seen that subjects expect the most effective leader to behave in a significantly different manner when he has high position power than when he is in a position of low power. This effect is significant beyond the .001 level in all four analyses. More specifically, the MEL is expected to ask fewer

questions, give more answers, and to show more negative and less positive socio-emotional behavior when he has a high power position than when he has a low power position. Table 6 presents the mean differences for each of the four behaviors.

Table 6 about here

In addition, it should be noted that the leader's power position is the second most important determinant of expectations in all four analyses. As might be expected, position power appears to account for slightly more of the variance of task behaviors than of socio-emotional behaviors. More specifically, while position power accounts for 20.9 per cent of the controlled variance in expectations about "giving answers" and 20.3 per cent of the controlled variance associated with "asking questions," it only accounts for 16.1 per cent of the variance of negative socio-emotional behavior and 14.8 per cent of the controlled variance of positive socio-emotional behavior. In other words, it appears that unlike affective relations which appear to have a similar influence on all types of behavior, the leader's power position is most important in influencing his task-related behaviors and less important with respect to interpersonal behaviors.

Affective Relations X Task Structure Interaction - This interaction is not significant in any of the four analyses. Further, in no case does this interaction account for more than 0.2 per cent of the total variance or more than 2.1 per cent of the controlled variance. Thus the relative unimportance of the task-structure dimension as a determinant of expectations about the MEL's behavior is again demonstrated.

Affective Relations X Power Position Interaction - In three of the four analyses, this interaction is significant beyond the .001 level of confidence. Similar to the power variable, the affective relations by position power interaction appears to have differential influence on different types of behaviors. More

TABLE 6

The Influence of the Leader's Position Power on Expectations About the Most Effective Leader's Behaviors

Type of Behavior	Hi Position Power	Lo Position Power	F
Positive Socioemotional	16.46	17.73	23.55
Negative Socioemotional	11.49	10.33	24.54
Giving Answers	18.70	17.49	32.54
Asking Questions	16.69	18.00	19.04

All F's significant beyond the .001 level of confidence. The higher the mean score, the more likely the MEL will engage in the particular type of behavior. Scores can range from 3 to 24.

specifically, although this interaction is the third largest determinant of variance in expectations in the three analyses where it is significant, it is considerably more important with respect to interpersonal behaviors than with respect to task behaviors. That is, this interaction accounts for 14.8 per cent of the controlled variance in expectations about the MEL's positive socio-emotional behavior, and 16.1 per cent of the controlled variance associated with negative socio-emotional behavior. In contrast to this, it only accounts for 7.1 per cent of the controlled variance associated with asking questions and none of the variance associated with giving answers.

Table 7 about here

The means for the three significant interactions may be seen in Table 7. In all three cases, it appears that when the leader is in a task situation having good affective relations, subjects do not expect the MEL to behave differently when he has high power than when he has low power. However, in those situations where the leader has bad affective relations with his members, the MEL is expected to behave quite differently depending upon his power position. More specifically, when there are poor affective relations and the leader has a high power position, he is expected to ask fewer questions, and show more negative and less positive socio-emotional behavior, than when he has a low power position.

Task Structure X Power Position Interaction. In Tables 3 and 4, it can be seen that this interaction reaches the .01 level of significance in only one of the four analyses. Interestingly enough, this one significant interaction is with respect to the only type of behavior that was not influenced by the affective relations X position power interaction--namely, giving answers. Again, however, it

TABLE 7

The Influence of the Affective Relations x Position Power Interaction or Expectations about the Most Effective Leader's Behavior

Position Power	Affective Leader-Member Relations: Good	Bad	Good	Bad	Good	Bad
High	18.61	14.30	9.86	13.11	18.18	15.19
Low	18.71	17.08	9.82	10.84	18.72	17.28
	A. Positive Socioemotional Behavior		B. Negative Socioemotional Behavior		C. Asking Questions	
	F = 50.26		F = 30.24		F = 13.10	

All F's significant beyond the .001 level of confidence. Scores range from 3 to 24. The higher the socre, the more likely the MEL will engage in the behavior.

must be noted that even though this one interaction is significant, it must be considered skeptically since it accounts for less than one-half of one per cent of the total variance, and only 5 per cent of the controlled variance of expectations about the MEL's "answer giving" behavior. Further evidence of the relative unimportance of this interaction can be seen in Table 8, which presents the means for this interaction. There it can be seen that although the power variable has a large

Table 8 about here

influence on expectations about question answering behavior, task structure has relatively little. The interaction indicates that when a leader has a high power position, he is expected to answer slightly more questions when the task is structured than when it is unstructured. In contrast, when he has a low power position, he is expected to answer slightly more questions when the task is unstructured than when it is structured. Neither of these differences, however, are significant at the .01 level of confidence.

Affective Relations X Task Structure X Power Position Interaction. In Tables 3 and 4, it can be seen that the triple interaction does not approach significance in any of the analyses. Further, and perhaps more importantly, it can also be seen that in no case does this interaction account for more than 0.1 per cent of the total variance or more than 1 1/2 per cent of the controlled variance.

To summarize briefly then, although more than 90 per cent of the controlled variance in expectations about the way the MEL should behave is attributable to variations in the group-task situation, almost all of this variance can be accounted for by only two variables and their interaction. More specifically, affective relations, position power, and the affective relations X position power interaction accounts for 90.9 per cent of the controlled variance of positive

TABLE 8

The Influence of the Task Structure x Position Power Interaction on Expectations about the Most Effective Leader's "Answer Giving" Behavior

	Task Structure	
Position Power	High	Low
High	18.98	18.42
Low	17.27	17.72

$F = 9.52$, $p < .01$

Scores can range from 3 to 24. The higher the score, the more likely the MEL engages in "answer giving" behavior.

socio-emotional scores, 85.9 per cent of the controlled variance of negative socio-emotional scores, 85.4 per cent of the controlled variance of expectations about the LEL's "asking questions" behavior, and 79.6 per cent of the controlled variance of expectations about the LEL's "giving answers" behavior.

Thus while consistent with Fiedler's notions--different group-task situations do appear to "demand" different kinds of leadership behavior for maximum group effectiveness--only two of the three dimensions isolated by Fiedler appear capable of consistently explaining a significant per cent of the variation in these "demands." Further, it must be recalled that although these two dimensions do account for between 80 and 90 per cent of the controlled variance, they are only accounting for between 6 and 16 per cent of the total variance. Clearly then, it is quite obvious that other variables associated with the group-task situation remain to be isolated. Indeed, it is worth noting that in his more recent articles, Fiedler has been doing just this. For example, he has considered the homogeneity-heterogeneity of the group and the amount of stress (either internal or external) that the group is working under. There can be little doubt that considerably more research is necessary before the various complexities of the group-task situation are isolated and the importance of these variables as determinants of "demands" are assessed.

Before concluding, however, a note of caution must be reintroduced. Earlier in this paper, it was pointed out that while Fiedler's contingency model was based on an analysis of "real" groups in "real" situations, the present paper has only been concerned with subjects' beliefs about the way "the most effective leader" would behave in eight hypothetical situations. Clearly, although a subject may expect the LEL to behave in the same manner on structured and unstructured tasks, this does not mean that the LEL will or does behave in the same manner. Similarly,

although in the hypothetical situations considered in this paper, the subjects expect the MEL to behave quite differently when he has high position power than when he has low position power, this does not mean the MEL will or does behave differently. To put this in a slightly different way, although the difference between having high and low position power may appear quite large in these hypothetical situations, in actual groups this distinction may have little, if any, practical significance.

Thus, in conclusion, although the present paper has presented evidence supporting some of Fiedler's assumptions underlying the contingency model (i.e., that different situations demand different leadership behaviors, and that subjects who differ in LPC do not perceive these demands differently), and some evidence questioning other assumptions (i.e., that the demands covary with the three dimensions of the consistency model in a specific manner), it must be recalled that these results can in no way be taken as a direct test of the model. Rather they can only be viewed as supplementary to Fiedler's position. Where they agree with his position, they provide some convergent validity for his arguments; where they disagree, they merely raise questions about the validity of his assumptions and point to directions where further research with "real groups" in "real situations" must be conducted.

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Footnotes

1. For a more complete discussion of the use of the analysis of variance technique as an indicant of strength of relationship and the distinction between total and controlled variance, see Fishbein (1963) and Triandis and Triandis (1965).

2. In reviewing an earlier draft of this paper, Gordon O'Brien suggested another reason why Task Structure may have had such a small effect in the present study. Specifically, he suggested that the use of Bales' categories for describing leader behavior may have mitigated against finding differences since Bales' categories were primarily designed to handle behaviors in one type of task situation, namely, a situation in which a group attempts to solve an unstructured verbal problem. Although it is possible that significant differences might have been found had other behavioral categories been used, it should be recalled that Bales (1951) considers his categories as being capable of enveloping all the behavior that can occur in any small face-to-face group. In keeping with this, Bales' Interaction Process Analysis has been used in many different contexts. Similarly, Fiedler and his associates have often used the BDQ in various group-task situations.

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13. ABSTRACT

The present paper can best be viewed as an attempt to explore two of the basic assumptions underlying Fiedler's (1964, 1965) Contingency Model: (1) the assumption that different group-task situations "require a different leader-group member interaction," i.e., "demand" different types of leadership behaviors; and (2) the assumption that these "demands" will covary systematically with the three dimensions of the group-task situation specified by the Contingency Model. One hundred forty-one male undergraduates rated the way they believed the "Most Effective Leader" (MEL) should perform in each of eight group-task situations on a Behavioral Description Questionnaire. The results indicated that although these ratings of the MEL's behavior did vary across the different group-task situations, the ratings were significantly influenced by only two of the three group-task dimensions isolated by Fiedler, namely, the leader-member relations and the position power dimensions. Additional hypotheses related to the Contingency Model were also investigated and discussed.

14. KEY WORDS

Contingency Model
Leadership effectiveness
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